Attachment D

Water Use Estimates for the Lake Tahoe and
Truckee River Basins –
Letter from the Department of Water Resources
Dated June 2, 2003

STATE OF CALIFORNIA - THE RESOURCES AGENCY GRAY DAVIS, *Governor*

DEPARTMENT OF WATER RESOURCES
CENTRAL DISTRICT
3251 S STREET
SACRAMENTO, CA 95816-7017

JUN 0 2 2003

RECEIVED
JUN 17 2003
BUREAU OF RECLAMATION
Lahontan Basin Area Office

Mr. Tom Strekal
Western Nevada Agency
1677 Hot Springs Road
Carson City, Nevada 89706

Subject: Water Use Estimates for the Lake Tahoe and Truckee River Basins

Dear Mr. Strekal:

This letter is to transmit information for the Truckee-Carson Water Accounting Model in accordance with the request by the TROA EIS/EIR Management Team. The TROA EIS/EIR Management Team requested further specificity in the updated estimates of water use in the California portions of the Lake Tahoe and Truckee River Basins that we provided in our April 16th letter. These updated estimates were determined from the California Department of Finance's 2000 census numbers. These estimates are used as input parameters in the Truckee-Carson Water Accounting Model for year 2002 and year 2033 alternatives.

The following tables list estimates and projections of water use in the Lake Tahoe and Truckee River Basins in the years 2002 and 2033, the years identified for the current and future TROA EIS/EIR conditions. Estimates are provided for current use and each of the alternatives that will be considered in the TROA EIS/EIR: the No Action Alternative, the Local Water Supply Alternative, and TROA Alternative. The estimates also include both surface and ground water use along with the exercise of U.S. Forest Service and State Parks water rights in the Lake Tahoe Basin.

Table 1 - Lake Tahoe Basin Water Use (AF/year)

		Surface & Ground Water	Forest Service	State Parks	Total Water Use
Current Use	(2002)	17,286	1,103	308	18,697
EIS/EIR Alternatives					
No Action	(2033)	20,090	2,560	350	23,000
Local Water Supply	(2033)	20,090	2,560	350	23,000
TROA	(2033)	20,090	2,560	350	23,000

The following table shows the Truckee River Basin water uses needed for the input to the model. The surface water uses are divided into Municipal and Industrial (M & I), Agricultural (Ag), and Recreational (Rec) water use.

Table 2 - Truckee River Basin Water Use (AF/year)

		Ground Water	Surface Water Uses				Total Water Use
			M & I	Ag.	Rec.	Total	
Current Use	(2002)	7,573	1,000	1,500	300	2,800	10,370
EIS/EIR Alternatives							
No Action	(2033)	19,600	1,000	1,500	600	3,100	22,700
Local Water Supply	(2033)	18,400	2,200	1,500	600	4,300	22,700
TROA	(2033)	18,400	2,200	1,500	600	4,300	22,700

We understand that additional information is needed for the Accounting Model on two diversions of water out of the Lake Tahoe and Truckee River Basins. About 7000 AF/year is diverted out of the Little Truckee River for irrigation in Sierra Valley, which is in the Feather River Basin of the Sacramento River Region. About 2000 AF/year is diverted out of the Lake Tahoe Basin from Echo Lake into the South Fork of the American River. We project that both of these will remain relatively unchanged through to the year 2033.

Similarly, the model will also utilize wastewater discharge information. The South Tahoe Public Utility District (STPUD) discharges treated wastewater into holding ponds in the Carson River Basin. The source of this wastewater is water diverted within the Lake Tahoe Basin, which is then used in the STPUD service area and treated at the STPUD wastewater treatment plant. The current year 2002 estimated average annual flow of treated wastewater from the Tahoe Basin to the Carson Basin is 5,000 AF/year. This is projected to increase to 6,500 AF/year by the year 2033.

Another special model requirement is Tahoe-Truckee Sanitation Agency (T-TSA) discharge information. The T-TSA collects wastewater in North Lake Tahoe and Truckee River Basins. After treatment, T-TSA discharges the wastewater onto lands southwest of the confluence of the Truckee River with Martis Creek. The actual discharges can vary significantly due to flood events that produce high infiltration and inflows. The following table shows actual discharges in the year 2002 and projections of average annual discharges from T-TSA for 2033.

Table 3 – T-TSA's Actual and Projected Effluent Flows (AF/year)

SOURCE OF T-TSA WASTEWATER	ACTUAL DISHARGE 2002	PROJECTED DISCHARGE 2033
Lake Tahoe Basin	2,523	2,600
Truckee River Basin	2,569	6,000

If you have any questions or need additional information concerning the methods or reported values, please call me at (916) 227-7564.

Sincerely,

Tim Nelson

Tim Nelson, Engineer W.R.
California-Nevada Assessment Section

cc: Mr. Kenneth Parr
U.S. Bureau of Reclamation
705 North Plaza Street, Suite 320
Carson City, NV 89702

Ms. Mary Jo Elpers
U.S. Fish and Wildlife Service
1340 Financial Blvd., Suite 234
Reno, NV 89502

Mr. Tom Scott
U.S. Bureau of Reclamation
705 North Plaza Street, Suite 320
Carson City, NV 89702

Mr. Rod Hall
Sierra Hydrotech
1024 Simon Dr.
P.O. Box 169
Placerville, CA 95667